

Vol. 30, No. 1

The American Precision Museum is open daily 10 am - 5 pm, Memorial Day weekend through October.

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TOOLS & TECHNOLOGY

AMERICAN PRECISION MUSEUM • SUMMER 2012

Full Duty: The Civil War Collection of Howard Coffin

In the foreword to Howard Coffin's book, Full Duty, Edwin Cole Bearss said that because of Coffin's heritage, background, and interest, he was predestined to write a history of Vermont in the Civil War. Perhaps it naturally followed that Coffin became a collector of Vermont and the Civil War. Howard Coffin is a seventh generation Vermonter with six ancestors who fought during the Civil War.

He was introduced to the Civil War by his mother's stories about grandfather Elba Jillson, a private in the Ninth Vermont Infantry.

On his first, accidental, visit to a Civil War battlefield, Virginia's Salem in 1966, Coffin was hooked for life on Civil War history. Since then he has explored the war's eastern theater, paying particular attention to sites where Vermonters marched, camped, fought, suffered, and died. He has devoted much of the last quarter century to researching Vermont's role in the Civil War, and to preserving the battlefields where Vermonters fought.

All the while, Coffin has collected Vermont Civil War-related memorabilia. Now for the first time some of this remarkable collection is displayed, at the American Precision Museum, in an exhibit that bears the name of Coffin's first Civil War book.

The Vermont story is significant because out Full Duty continued on page 4



Ora Paul, Woodstock Vermont On December 28th 1862, Paul was in command of two companies of the 12th Vermont assigned to watch for raiders. When he heard the approach of the Confederate cavalry, he ordered two volleys fired into the in Vermont regiments darkness, and the Confederates turned and retreated. Capt. Paul's copy book lists the supplies requested from the quartermaster.

The Museum's Top Ten List: **The Robbins & Lawrence Armory During The Civil War**

by Carrie Brown

When we talk about important Civil War sites, we tend to think of rolling battlefields, makeshift hospitals, and horrific prisons. But as I conducted the research for the museum's new exhibition Arming the Union, the deeper I dug, the more I realized that the Robbins & Lawrence Armory played an enormous role during the war.

1. In 1861, the building was owned by Lamson, Goodnow & Yale, makers of tools and sewing machines. Ebenezer Lamson had strong ties to the anti-slavery community. Before he moved to Vermont, his home in Massachusetts had been a stop on the Underground Railroad.

Top Ten List continued on page 5

Calendar of Events 2012

EXHIBIT

Full Duty: The Civil War Collection of Howard Coffin

presents the first-ever exhibition from the private collection of Vermont's foremost Civil War historian.



This drum was used for training sharpshooters in Randolph VT. The violin was carried to Gettysburg and played on the battlefield the day after the battle by William McIntyre who fought with the 13th Vermont.

EXHIBIT

Arming the Union: Gunmakers in Windsor, Vermont

uncovers the surprising influence of a little-known Vermont factory. Operating out of the old Robbins & Lawrence Armory in Windsor, the machine tool firm Lamson, Goodnow & Yale played a critical role in outfitting the Union Army.

EXHIBIT

Highlights from the Collection

provides a special opportunity to display a selection of interesting artifacts. While there is not a thematic presentation, objects have been selected for their interest and significance. Some, but not all, relate to the Civil War. Machines on display include the **Bridgeport Milling Machine**, Serial #1, made by the Bridgeport (CT) Pattern and Model Works. After its introduction in 1938, this became the most popular milling machine of the 20th century.

Featured firearms from the museum's collections include the work of early Windsor gunmakers like **Nicanor Kendall**, whose 1840 rifle, serial number 915, is considered to be a 'deluxe' model. This rifle is unusual because the serial number, in addition to being on the gunstock, also appears on the hammer, sight, and ramrod. This was a recent gift from Terry Tyler, Dorset VT.

Friday, June 1 5:30 - 7:30 pm Opening Reception with Howard Coffin

Sundays at 3:00 pm June 10, July 22, August 19, September 16, October 7 Behind The Scenes Tours

Would you like to learn more about all the museum's artifacts that are not on exhibit and see the collections storage area? Then Behind the Scenes Tours are for you! Space is limited to 12 so please call ahead or reserve online.



Howard Coffin with Grand Army of the Republic hat

Saturday, June 23 Noon - 2:00 pm Antique Car Rally

with the Vermont Automobile Enthusiasts who will be stopping at the museum as part of their 2012 Vermont 'run'. Visitors will be able to see a fabulous collection of vintage automobiles with their owners. VAE, founded in 1953, is one of the oldest car clubs in the Northeast, sponsoring the Stowe Car Show every August.



Colt Model 1860 Army Revolver Handguns were carried by officers and cavalrymen, and the most popular handgun was the Colt revolver. The U.S. government purchased more than 120,000 from the Colt factory in Hartford CT.

Sunday, July 8 3:00 pm Lincoln, Gettysburg, and Vermont

Vermont historian Howard Coffin will be discussing Vermonter's attitudes towards Lincoln, their support for him, the key role Vermont played at Gettysburg, and the Gettysburg address.



Wednesday, August 8 3:00 pm An Afternoon for Educators

Join colleagues for a reception and special tour. Visit our exhibits and learn about using our traveling education kit, The Industrial Revolution in Northern New England, in your classroom (grades 7-12), and our offerings for your students. Contact the museum to reserve.

Museum Admission

Adults: \$7.50

Students: \$4.00

Family (2 adults, 2 children under 18): \$19.50

Special Group Rates: Call the museum for details



Lt. Col William Munson was a graduate of Norwich University. His writing desk with a sketch of the camp of the 13th Vermont Regiment near Fairfax Courthouse VA shows the location of the officer's and soldier's tents, the hospital, post office, mess tents, and commissary.

Sunday, September 23 3:00 pm

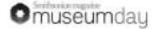
Vermont and Human Freedom

Historian Howard Coffin will trace Vermont's human rights record from the Constitution, through the anti-slavery movement, up to the Civil War, and into the war itself.

Start your afternoon in Windsor at the Old Constitution House, then a short walk down Windsor's historic Main Street to the museum.

Saturday, September 29 10:00 am - 5:00 pm Special museum tour at 2:00 pm

It's Smithsonian Day at museums around the country! Download the Museum Day Admission Card from the Smithsonian's web site and visit us, as well as other museums in our area – all offering free admission.



Saturday, October 13 9:00 am - 5:00 pm

13th annual Model Engineering Show Visit with New England's finest model engineers. Special workshops and presentations will feature a 1922 unrestored Harley Davidson from G&G Restorations, Proctorsville VT. Learn about restoration of an 1870 Lamson, Goodnow & Yale Profile Milling Machine, designed in 1848 by Frederick Howe and built in the Robbins & Lawrence Armory.





The American Precision Museum is honored to participate in the Blue Star Museums program, a collaboration with the National Endowment for the Arts, Blue Star Families, the Department of Defense, and more than 1,500 museums across America. From May 28 – Sept. 3 we will offer free admission to all active duty military personnel and up to five family members.

Full Duty continued from page 1

of the hills came some of the finest units to serve in the war, as more than 34,000 men joined up. Quickly realizing their value, commanders placed them time and again in crucial positions. At home, noncombatants supported the war effort with steadfast determination. In the end, the state made an outsized contribution to the hard-won victory that preserved the Union and destroyed slavery, making good Abraham Lincoln's resolution, stated at Gettysburg, that the nation should have "a new birth of freedom."

Full Duty tells the Vermont story using personal objects. Through diaries, journals, and letters, the visitor meets the men who served and learns of their agonies and triumphs. Artifacts are many, including the most important pistol in Vermont Civil War history and the bloodstained diary of a Vermonter killed at Gettysburg. And the visitor understands the challenges faced by those back home and their grief when news of a loved one's death or wounding would arrive from far away.

Texan Frank Vandiver, Civil War historian, in a letter to Howard Coffin, said of the Vermont troops, "*If I were a northern leader planning a defense*,



I would anchor it on the Vermont Brigade. Although there may be units better known, few have such an unblemished record as the Vermont Brigade. Vermont breeds good men who made and make good soldiers."

The story of Vermont in the Civil War is unique, and powerful. Throughout this exhibit the Vermonters whose lives were touched by war tell a story difficult to forget.



Howard Coffin's extraordinary collection of artifacts, documents, photographs, and images tells the story of Vermont in the Civil War with a vivid clarity. Vermont soldiers at the front and their families working in factories and farms back home offered their courage and skills to the Union war effort in a measure well beyond the state's percentage of the Northern population. In conjunction with the exhibition of machine tools made in this factory for the production of arms, Full Duty demonstrates Vermont's vital role in the war.

 James M. McPherson, George Henry Davis 1886 Professor of American History Emeritus, Princeton University and Pulitzer Prize, 1989, *Battle Cry of Freedom: The Civil War Era*

Personal trunk of Sergeant Julius Lewis of Poultney VI. He was the son of Vermont farmers and enlisted at the age of 24.

Top Ten List continued from page 1

2. Lamson, Goodnow & Yale made 50,000 rifles for the Union Army. Rather than the standard Springfield Rifle, Lamson arranged to make the Special Model 1861, which had much more in common with the Enfield rifles that Robbins & Lawrence had made for the British government in the 1850s.

3. In the summer and fall of 1861, the workforce at LG&Y went from a few dozen to about 300. Machinists and gunmakers were recruited from all over New England.

4. Gas lighting was introduced in Windsor in the summer of 1861 and was put into the armory in early October. After that, the armory ran night and day.

5. The men worked twelve-hour shifts. One machinist reported that his supervisor made them "work every minute of the time."

6. Before starting on the 50,000 guns, LG&Y spent many months building machinery — for their own use, and for other government contractors.

7. Many young men who worked at the armory also served at the front. Two brothers — John and Will Humphreys—en-listed together and were both wounded on the same day at the Battle of Antietam.



Rifling Machine Robbins & Lawrence, Windsor, Vermont, circa 1853 In the 1850s, machine designers, including those in Windsor, developed rifling machines for cutting the parallel spiral grooves inside the gun barrel so a bullet could be made to spin as it flies.



Special Model 1861 rifle, made by Lamson, Goodnow & Yale, Windsor VT, circa 1863 This was the most common firearm for Union soldiers with an effective range well over 200 yards, allowing it to be fired several times a minute. The Amoskeag Machine Company in Nashua, New Hampshire, was outfitted with Lamson machinery and also produced this model.

8. Lamson, Goodnow & Yale completely outfitted a gunmaking department at the Amoskeag Machine Company—a textile mill in Manchester, New Hampshire, that would eventually produce 27,000 rifles for the Union Army.

9. LG&Y milling machines, drill presses, rifling machines, and turret lathes were sold to the Springfield Armory, Colt, Starr Arms, Sharps, Remington, the Providence Tool Company, and many other gun factories.



Iron Planer, E. G. Lamson, Windsor, Vermont, circa 1864 During the war, Lamson sold planers to other gunmakers throughout the Union, including the Springfield Armory, the American Fire Arms Company, Stevens Brothers, and the Connecticut Arms Company.

10. All told, the majority of the rifles used by Union troops were made in factories that had machine tools made in the old Robbins & Lawrence Armory in Windsor, Vermont.

The Robbins & Lawrence Armory is, of course, still standing—now home to the museum—and it is indeed a significant Civil War site. Inside this historic space, the Civil War-era machinery, the guns, and the stories of the men who worked there are brought together in the exhibition *Arming the Union*. Carrie Brown is a writer, historian, and museum curator whose work focuses on finding the human story behind historic events and on exploring the interplay between technology and culture. She has served as consulting curator for eight exhibitions at the American Precision Museum. She holds a Ph.D. from the University of Virginia and lives in Etna NH.

Shaping America: Machines and Machinists at Work

In 2011 the National Endowment for the Humanities awarded the museum a major grant of \$340,000 for a new permanent exhibit to be created over three years. The goal of the project is to provide a rich and deep interpretation of the Robbins & Lawrence Armory as an important site in the emergence of precision manufacturing in this country.

In the mid-19th century the 1846 Robbins & Lawrence Armory, now home to the American Precision Museum, was a place of innovation and a center for excellence. When Robbins, Kendall, and Lawrence took their rifles with interchangeable parts to the Crystal Palace Exhibition in London in 1851, the reaction was one of astonishment that the Americans had succeeded in creating a product with truly interchangeable parts. Military leaders and industrialists soon traveled to Windsor to learn more about the new American System of manufacturing, and workers from Windsor were recruited by other emerging manufacturing firms throughout New England.

Since its founding in 1966 until recently, the museum's exhibit philosophy was one of minimal interpretation. The main exhibit floor was lined with rowupon-row of machine tools bearing small paper labels. Additional large objects, Windsor-made firearms in display cases, and a few historic sewing machines and typewriters merely suggested the profound implications of the rise of the "American System."

Shaping America is guided by a new interpretive plan, developed over several years by experts in the field, museum staff

and volunteers, to provide a rich interpretation of the collection and the site. It will bring the machines and the human story together in ways that can engage a wide audience. *Shaping America* explores three themes: **the nature of innovation**, **the role of craftsmanship and skill, and the story of how precision manufacturing formed the backbone of American industrial power.** This new exhibit will make a distinctive contribution to public understanding of the past and the role of technology and innovation in the present and future.

Arming the Union: Gunmakers in Windsor, Vermont, opens in 2012, commemorating the 150th anniversary of the Civil War. Occupying only a portion of the exhibit space, it is a prototype for the full Shaping America exhibit coming next. Arming the Union (see related story on page 1, 'Top Ten List') allows us to test exhibit techniques such as video, audio, computer animations, and interactive activities. It presents new research and depicts the roles of individuals who made and used the tools. Most importantly, it allows us to observe and record the reactions of our visitors. Thus, our plans for the other sections of Shaping America to come will be soundly based on reflection and visitor feedback.

Shaping America will tell the story about a network of machinist/innovators that gradually developed new tools and created the machine tool industry, which helped establish a modern, technological society.



This rendering by Mary Azarian, Caldecott Medalist from Plainfield VT, features George Coates. At age 14 he became an apprentice machinist at Lamson, Goodnow & Yale in 1863, at the height of the Civil War. He went on to hold 40 patents and owned his own machine tool company.

Tropical Storm Irene wreaks havoc at Museum

Tropical Storm Irene wreaked havoc in Vermont on August 28, 2011, and while Windsor was largely spared, the museum suffered significant losses. The Mill Brook damaged the retaining wall by the museum and washed away our beautiful new interpretive area finished just two weeks earlier. This was a gift from the Morris Group in celebration of the company's 70th anniversary in 2011 and in memory of Dorothy Morris who founded the company with her husband, Robert.

Although the basement was briefly flooded, no artifacts were affected, and there was no permanent damage to the building. The same cannot be said for the retaining wall, which must be rebuilt before the landscaping can be redone. We are also exploring flood-proofing measures to help the site and basement area survive future floods with less damage. These mitigation strategies are likely to add significantly to the rebuilding costs. We are still working with FEMA.

Preservation Trust of Vermont, Vermont Community Foundation, and the National Endowment for the Humanities through the Vermont Humanities Council, and former APM Board Chair Margaret Rothchild and her husband Eric have provided post-Irene funding. The museum is very grateful for these gifts and also to others who have stepped up to help.

Using some of the funds in hand, we are under contract with a civil and structural engineering firm for design drawings for the new wall. Experts from two construction firms have also visited the site to contribute their ideas as to the



Before: the newly completed Dorothy Morris Memorial Interpretative Area

best approach to our complex situation. We are in touch with state and local officials in the design phase to ensure that the proposed plan will receive the required permits. The next step is construction drawings necessary to establish realistic cost estimates. At this point we can only guess at the re-

After: the Interpretative Area and retaining wall suffered severe damage by the flooding Mill Brook

building costs. We may still be facing a gap of \$150,000, and we will not begin construction until all the funds needed are pledged or in hand. Please contact the museum if you would like to learn more.

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Hubbard Yonkers Contoocook NH

EXECUTIVE DIRECTOR Ann Lawless

Founding Director Edwin Battison (1915-2009)

The American Precision Museum, founded in 1966, preserves the heritage of the mechanical arts, celebrates the ingenuity of our mechanical forebears, and explores the effects of their work on our everyday lives. The museum is housed in the original 1846 Robbins and Lawrence Armory in Windsor, Vermont. The Armory was designated a National Historic Landmark in 1972. The museum holds the largest collection of historically significant machine tools in the country.

Day In and Day Out: Volunteering at the Museum

Clay Washburn has been a crucial volunteer at the museum for more than a decade. Last season he acted as informal mentor and coach to our summer student interns in the working machine shop. Clay filled the gap after the interns left during our busy fall. He always ensures that no visitor leaves without having learned something unique about interchangeable parts, the Robbins & Lawrence Armory, and machine tools.

Clay worked at Cone-Blanchard for 37½ years and was the very last person to leave when the plant closed. Clay shared his thoughts about the industry, the Robbins & Lawrence Armory, and the American Precision Museum in an oral history interview with the Vermont Folklife Center in 2009.

"When I was first hired at Cone, they brought me out into the turret lathe department and said, '*Neil Pinkham's* gonna babysit you and show you how to run a lathe.' So I worked with him for about a week and then they put me across the aisle from him where he could keep his eye on me. He gave me my own machine, and I took it from there. I wanted the job, and I learned the formulas to use the numbers I needed. He was a great machinist and a great guy, and he was very practical and a pretty good trainer too. Over the years I ended up training a lot of people myself too."



Clay Washburn with volunteers



Clay Washburn with 1870 Lamson, Goodnow & Yale Profile Milling Machine

Clay continues, "That's the beauty of the interchangeability of parts that Robbins & Lawrence understood in this building way back in 1846. They understood that if you make each part to a close tolerance, you don't have to do a whole bunch of hand-fitting. And that's why you can go to any automotive store in the world and buy a set of sparkplugs that will fit

your car, or anything else, for that matter.... That's the real innovation that came out of *this* building. You know, Robbins & Lawrence really set the industrial world on fire. And they're the ones that got all that started right here in Windsor. Smith & Wesson, Robbins & Lawrence, but then you had Jones & Lamson who came out of this building too—all those manufacturers. And then all the ones that sprang off of them and all their employees. They had an idea, and they invented this or that, and maybe in their garage, but it was the ideas that were developed here."

"So, yeah, there's a huge amount of

The Vermont Folklife Center in Middlebury VT conducted and archived twenty interviews as part of the museum's planning project to develop new exhibits that tell the stories of machinists in Vermont's machine tool industry. This interview with Clay is among the richest and most engaging and will feature prominently in *Shaping America: Machines and Machinists at Work*. history here and the innovation that was spawned from here.... And I think—I think the integrity that came from here spilled over into the other shops."

2011 Acquisitions to the Collections

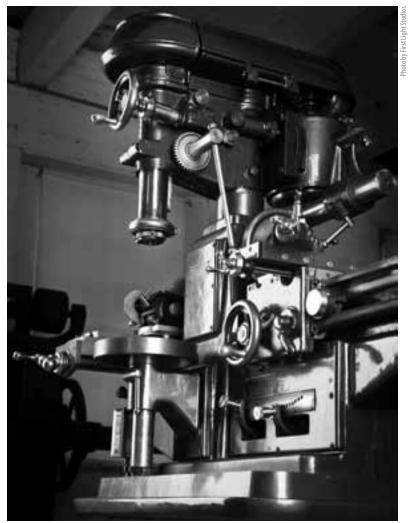
Davis Model #1 keyseating/broaching machine for cutting keyways, patented March 20, 1883 by W.P. Davis, Bloomfield, NY. *Gift of Hansford Parts and Products, Robert Detweiler President, Macedon VT.*

Deluxe percussion underhammer rifle, serial number 915, circa 1840, made by Nicanor Kendall of Windsor, VT, with German silver furniture including trigger guard and engraved barrel. *Gift of Terry Tyler, Dorset VT.*

Oak Gerstener tool chest, owned and used by Glen Riddick during World War II, containing his machinist's tools, Navy paycheck signature card, and journeyman booklet. *Gift of David and Joan Adamson, Melbourne FL*. Gilman 4-in-1, circa 1940, was made by Gilman Engineering Works, Grafton WI. Only a few hundred of these were made for the U.S. Navy for use on destroyers during WWII. This machine combines milling, boring, drilling, and turning all in one machine. As far as we know, this is the only 4-in-1 still in existence. *Gift of Russell Gilman, Sturgeon Bay WI*.

Container made for a gear cutter by Fellows Gear Shaper, Springfield, Vermont, circa 1940. *Gift of Don Whitney, Springfield VT.*

Gear shaving/finishing tool, circa 1940, made by Gleason Cutting Tools, Rochester, NY. *Gift of John Knox*, *Gregory MI*.



Gilman 4-in-1, circa 1940

Town of Windsor ledger recording loans and sales between individuals and businesses from 1892-1903. The ledger includes 40 pages describing the inventory of the Windsor Machine Co. *Gift of Shirley Grainger, Alden Sherman, Terry Tyler, Robert Vogel, Don Whitney, Hub Yonkers.*

'Description of Ural and Siberian Factories in 1735,' Technical Editor, Edwin Battison;

'Description of Tula Weapon Factory,' translation edited by Edwin Battison;

Slag, a by-product of iron production from Windsor manufacturing operations. *Gift of Franklin Museum of Nature and the Human Spirit, Jay Boeri, Director.*

This Bridgeport Milling Machine and the numerical digital read-out system was a major addition to our Working Machine Shop last fall, thanks to Heidenhain. The company also sent one of their senior technicians, Danny Vitulo, to get the machine up and running and to train our staff and volunteers. The student interns quickly mastered the new machine, and visitors delighted in seeing another machine in action, especially the 'old' with the 'new.'



Bridgeport Milling Machine with Heidenhain's Acu-Rite numerical digital read-out system. Gift of Heidenhain Corporation, Rick Korte, President & Managing Director, Schaumburg IL.

From the Chairman, Board of Trustees and the Executive Director

The museum's annual report gives us the opportunity to reflect on our past accomplishments, and we are thrilled to report that generous individuals and corporate sponsors have helped us surpass our annual fund and membership goals. Even with that success this year, we are still working to close the gap in our operating budget. In these economically fragile times, that becomes an ongoing challenge.

The signature event of 2011 is still with us. Tropical Storm Irene struck on August 28, damaging our retaining wall and the beautiful new outdoor interpretive area, a gift from the Morris Group. Fortunately, our venerable building survived the two feet of water in the basement relatively unscathed. We are still working with FEMA to determine our recovery plans and flood proofing options. It remains to be determined how much help we might receive to improve the site so it could better withstand future disasters. While we are grateful for the support of many organizations and individuals who have helped us with post-Irene needs, we still face a daunting task ahead to raise all the funds needed. Stay tuned as we develop specific plans and goals.



Gilbert Whittemore Chairman, Board of Trustees



Ann Lawless Executive Director

In 2012 we will be restoring the masonry on the front entrance to the museum. And as we launch our two Civil War exhibits, we have enjoyed partnering with Vermont's Sesquicentennial Commission, which has created a strong collaborative marketing effort that will no doubt raise our site's profile. We launched our new website in March, complete with many more photos, on-line giving and membership, and museum shop sales.

The Association for Manufacturing Technology has invited us to exhibit again at the International Machine Tool Show in Chicago, September 10-15. We attended in 2010, and while it was a major undertaking for us, it was an event that has paid many dividends in return to the museum. This year we hope to introduce a new program of corporate sponsorship, which will provide a clear path for industry partners to support us.

Please enjoy this report on the past year's challenges and accomplishments, and let us hear from you with your comments. Thank you for being part of our success.

A Note of Thanks

This letter gives me the opportunity to personally thank Gil Whittemore for his leadership and commitment since joining the Board of Trustees in 2006. He will be stepping down as Trustee and Chairman at our annual meeting in July. Elected Chairman in 2008, with his expertise in museum law and the history of technology, he has been an invaluable resource leading us through some major accomplishments. He played a major role in shaping Vermont's new museum property law that led to the museum's Found in Collections project.

– Ann Lawless for the Board of Trustees.

Financials

Condensed Balance Sheets*

for the years ended April 30, 2011 and April 30, 2010

	2011	2010
ASSETS		
Cash and equivalents	\$ 25,716	\$ 17,555
Grant receivables	40,960	-
Other current assets	11,629	8,913
Property and equipment,		
net of depreciation	761,914	800,650
Investments	1,613,713	1,576,301
TOTAL ASSETS	\$ 2,453,932	\$ 2,403,419
LIABILITIES AND NET ASSETS		
Current liabilities	\$ 17,836	\$ 10,514
Unrestricted net assets	1,245,825	1,426,551
Temporarily restricted net assets	458,084	234,167
Permanently restricted net assets	732,187	732,187
Total Net Assets	\$ 2,436,096	\$ 2,392,905
TOTAL LIABILITIES		
AND NET ASSETS	\$ 2,453,932	\$ 2,403,419

Condensed Statement Of Activities And Change In Net Assets*

for the years ended April 30, 2011 and April 30, 2010

		2011	2010
REVENUE			
Donations, bequests, grants	\$	276,116	\$ 101,305
Admissions		17,571	20,209
Memberships		26,490	22,900
Investment income		54,822	58,678
Unrealized gain (loss) on investments		161,647	372,772
Other income, net		8,629	8,475
TOTAL REVENUE	\$	545,275	\$ 584,339
EXPENSES			
Salaries and benefits	\$	248,739	\$ 192,503
Depreciation		51,362	50,589
Occupancy, insurance and maintenance	ce	34,687	27,711
Office and publication costs		24,332	27,411
Professional services		21,768	25,415
Contracted services		15,030	36,708
Other expenses		106,166	65,466
TOTAL EXPENSES	\$	502,084	\$ 425,803
REVENUES LESS EXPENSES			
EQUALS CHANGE IN NET ASSETS	\$	43,191	\$ 158,536

*Complete reviewed 2011 and 2010 financial statements with accompanying notes and opinions are available at the museum office.

Board of Advisors

Doard Of Advisors	
Peter Brink National Trust For Historic Preservation (Retired)	Michael Newbold Marketing and Planning Executive (Retired), Former Trustee
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Strategic Communica- tions Advisor Michelle Larson	Donald Whitney Fellows Gear Shaper,
Larson-Vial, principal	(Retired), Former Trustee
Douglas Loudon Loudon Investment Management, Former Trustee	Allen Yale Lyndon State College, Professor Emeritus

2011 Report on Giving

Each year we are pleased to recognize in our annual report all our donors and friends who support the museum. Each and every gift is important and helps us with special exhibits and programs, as well as preserving the 1846 Robbins & Lawrence Armory and our historically significant machine tool collection.

Support comes to the museum in many ways — membership, annual and special purpose gifts, grants to the museum for specific projects, gifts in kind and those made in honor or in memory of a loved one. The gifts to the collection that come each year from interested donors are important, and this year these are listed in this report and described in some detail. Without them, our collection would not be as rich and as deep as it is. We are grateful for all of your support. Thank you.

E. Hubbard Yonkers Chair, Development Committee

ANNUAL AND SPECIAL PURPOSE GIFTS

January 1-December 31, 2011

Robbins & Lawrence Society

(\$2,500 +) Association for Manufacturing Technology Edwin A. Battison (*deceased*) James N. and Nancy J. Farley Heidenhain Corporation, Rick Korte Douglas M. Loudon Barry MacLean Eric and Margaret Rothchild Morris Group, Lee Morris Old Stones Foundation Rick Roesch

Mill Brook Society

(\$1,000 - \$2,499) C. Thorrez Industries, Camiel Thorrez Roald Cann (*deceased*) Cone Automatic Machine Co. Charitable Foundation New England Antique Arms Society Michael Newbold Jane Osgood and Ted Hilles Thomas P. Putnam Royal Products, Allan Curran Merritt Roe Smith Mrs. Peter Williamson

Precision Valley Society (\$500 - \$999)

Mark and Michele Aldrich Bryant Chucking Grinder Charitable Foundation Steven C. Carter Richard and Barbara Couch Robert Dufresne Charles Leni Preservation Trust of Vermont Peter D. Rebar John Richards John S. Taylor Robert and Helena Vogel Dr. Richard White Donald S. Whitney

Edwin Battison Society

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The 1966 Society

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The museum would like to thank Howard Coffin for sharing some of his remarkable collection with us. Through this exhibition, along with its companion, **Arming the Union**, we are able to tell the story of Vermonters on the battlefield and on the home front as it has never been told before.



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Captain Charles Abell, Orwell VT picked this magnolia leaf (held by Howard Coffin) on the grounds of George Washington's Mount Vernon and sent it to Hattie Aiken, the sister of one of his comrades.

Author, historian, preservationist, and former journalist, Coffin has written three books on Vermont and the Civil War, and *Full Duty: Vermonters in the Civil War* was the first history of Vermont in the Civil War published since 1886.

Coffin's remarkable collection, carefully accumulated over 40 years, documents the magnitude of Vermont's contributions to the Civil War. The museum is grateful to both Howard and Sue Coffin for their support in making *Full Duty* possible.



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